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Record

Washington University in St. Louis Feb. 21, 2008 record.wustl.edu

WUSTL to expand financial aid for low-income families

Washington University has announced that it will eliminate need-based loans as part of its undergraduate financial aid awards to students from low- and middle-income families.

Beginning in fall 2008, both entering freshmen and returning full-time undergraduate day-school students with parental incomes of less than $60,000 will not be expected to take out need-based loans and will instead receive grants from the University that will not have to be repaid.

Families with parental income somewhat higher than $60,000 also may receive additional student loan relief based on demonstrated need and their financial circumstances.

The additional grant aid will be funded by the increase in spending from scholarship and unrestricted endowments in the University's four schools with undergraduate programs, as well as from unrestricted University resources.

In recent years, about 60 percent of all WUSTL undergraduate students received financial aid, but Chancellor Mark S. Wrighton said that this new initiative will further increase the ability of students from low- and middle-income families to attend the University.

See **Aid**, Page 2

KEVIN LOWDER

Happy New Year **Lei Ma performs an energetic Kongfu routine as part of the Chinese New Year Celebration at Edison Theatre Feb. 12, sponsored by the Chinese Students and Scholars Association. Feb. 7 was the first day of the Chinese New Year. 2008 is a Year of the Rat, a time of hard work, activity and renewal. It is the first in a cycle of 12 animal signs. People born in the Year of the Rat are thought to be clever, bright, sociable and family oriented.**

Bacteria that cause urinary tract infections invade bladder cells

By Michael C. Purdy

School of Medicine scientists have found definitive proof that some of the bacteria that plague women with urinary tract infections (UTIs) are entrenched inside human bladder cells.

The finding confirms a controversial revision of scientists' model of how bacteria cause UTIs. Previously, most researchers assumed that the bacteria responsible for infections get into the bladder but do not invade the individual cells that line the interior of the bladder.

"Our animal model of UTIs has allowed us to make a number of predictions about human UTIs, but we felt it was critical to show this in humans," said senior author Scott J. Hultgren, Ph.D., the Helen L. Stoever Professor of Molecular Microbiology.

The results appeared in a recent issue of Public Library of Science Medicine.

Fully understanding what bacteria do in the bladder is critical to developing better diagnoses and treatments for UTIs, Hultgren said. The bacterium *Escherchia coli* is thought to be responsible for 80 percent to 90 percent of UTIs, which occur mainly in women and are one of the most common bacterial infections in the United States. Scientists estimate that more than half of all women will experience a UTI in their lifetimes, and recurrent UTIs will affect 20 percent to 40 percent of those patients.

"Recurrence is one of the biggest problems of UTIs," Hultgren said. "Even though we have treatments that eliminate the acute symptoms, the fact that the disease keeps recurring in so many women tells me that we need to develop better treatments."

Before this research, most microbiologists and urologists said they believed that *E. coli* wasn't getting into bladder cells.

"For example, there is a barrier in the bladder that prevents toxins and other things in your urine from leaking back into the body," said David A. Rosen, an M.D./Ph.D. student and lead author of the paper. "And it was

See **Bacteria**, Page 6

Unique Transnational Law Program to debut in fall 2008

By Jessica Martin

Washington University School of Law is launching a Transnational Law Program, a first-of-its-kind offering for students in both the United States and Europe.

This program expands upon the law school's ongoing partnership with Utrecht University.

Beginning in fall 2008, a new four-year combined degree program will be offered in association with four prestigious European universities: Utrecht University, Queen's University Belfast, University of Trento-Italy and Catholic University of Portugal.

The new Transnational Law Program allows U.S. students to study at both WUSTL law school and Utrecht University. Initially, these students will spend five semesters acquiring a solid foundation in U.S. law with an emphasis on international and transnational law from an American perspective.

They will then undertake three semesters of study in Utrecht, acquiring an appreciation for European law and enhancing their understanding of international and transnational law. Faculty and students from the other three European partners will contribute to the strength of the program.

"There is a growing need for lawyers who understand both American and European law, who can identify legal issues and know reliable sources in the U.S. and throughout Europe."

Kent D. Syverud

Upon completion, the U.S. graduates will earn a J.D. from WUSTL School of Law and an LL.M. from Utrecht School of Law. European participants will pursue a complementary course of study; after earning their degree from Utrecht, they will enter the LL.M. program here.

"There is a growing need for lawyers who understand both American and European law, who can identify legal issues and know reliable sources in the U.S. and throughout Europe," said Kent D. Syverud, J.D., dean of the School of Law and the Ethan A.H.

See **Law**, Page 6

Moss genome mapped in watershed study

By Tony Fitzpatrick

The complete collection of genes — the genome — of a moss has been sequenced, providing scientists an important evolutionary link between single-celled algae and flowering plants.

Just as the sequencing of animal genomes has helped scientists understand human genomic history, the sequencing of plant genomes will shed light on the evolution of the plant kingdom, according to Ralph S. Quatrano, Ph.D., the Spencer T. Olin Professor of Biology in Arts & Sciences and the corresponding author of the paper.

The accomplishment will "reveal insights into the conquest of land by plants," Quatrano said, including the identification of unique gene products and metabolic pathways as to how these diminutive plants protect themselves against stresses associated with living on land. The description of the genome is found in the Jan. 4, 2008, issue of Science magazine.

The entire genome of the moss *Physcomitrella patens* was completed by scientists at the Joint Genome Institute (JGI) in Walnut Creek, Calif., a sequencing facility of the Department of Energy. The effort to derive the genetic nuts and bolts, or base pairs, of *Physcomitrella* was coordinated by a consortium of international researchers from the United States, United Kingdom, Japan and Germany and involved more than 100 scientists in the initial annotation of the genome.

Quatrano played a major role in facilitating and organizing the final assembly of the authors, annotators and writers of the manuscript. He also coordinated much of the international effort and was the co-principal investigator with Brent Mishler, Ph.D. (University of California, Berkeley) on the initial request to the Community Sequencing Program of JGI.

Quatrano initiated some of the first sequences at WUSTL's Genome Sequencing Center in 2002, efforts that came about from a subcontract between the University and Quatrano's collaborators, Professors Celia Knight, Ph.D., and Andrew Cuming, Ph.D., both of the Center for Plant Sciences, University of Leeds in the United Kingdom.

The full genome project involved several additional foreign laboratories, including United Kingdom laboratories led by David Cove, Ph.D.; Cuming, a Japanese laboratory directed by Mitsuyasu Hasebe, Ph.D., and his associate Tomoaki Nishiyama, Ph.D.; and a German laboratory headed by Ralf Reski, Ph.D., and his associate Stefan Rensing, Ph.D., the first author of the paper.

The scientists at JGI who performed the overall sequencing found about 35,000 genes, represented in the full genome of just fewer than 500 million nucleotides. Included in this genome assembly are more than 250,000 expressed sequence tags (ESTs), fragments of genes that researchers know are expressed in the moss plant.

The WUSTL Genome Sequencing Center found the first 11,000 ESTs in the collabora-

See **Moss**, Page 6

Jean Allman named the Hexter professor in the humanities

By Barbara Rea

Jean Allman, Ph.D., became the inaugural holder of the J.H. Hexter Professorship in the Humanities in Arts & Sciences Feb. 12 in a ceremony held in Holmes Lounge. The professorship was established by a grant from the Danforth Foundation to recognize distinguished faculty members in the humanities.

"The Danforth Foundation's support over the years has had an immeasurable impact on this University," Chancellor Mark S. Wrighton said. "I am very grateful to the leadership within the Foundation who have made our institution the beneficiary of support of this magnitude, touching every aspect of our community."

Allman's appointment is in the Department of History, but her work is interdisciplinary in scope and addresses issues of interest to African and African American studies as well as women and gender studies. As an eminent historian of West Africa, her research explores the concepts of national identity, gender and colonialism, fashion and the politics of clothing and the modernity of indigenous belief systems. Central to her work is the study of African contributions to the modern world.

"Like Jack Hexter, Jean Allman has excelled in her field of study and will add a valuable multidisciplinary dimension to the history department," said Edward S. Macias, Ph.D., executive vice chancellor, dean of Arts & Sciences and the Barbara and David Thomas Distinguished Professor in Arts & Sciences.

The Danforth family established the Danforth Foundation in 1927. This private, independent foundation has been a major benefactor of the University. Recently, it has concentrated on supporting the St. Louis region with initiatives in the plant and life sciences, neighborhood redevelopment and downtown St. Louis revitalization.

The professorship — one of four established by the Danforth Foundation in 1997 — honors the late Jack Hexter, who spent much of his academic life as a historian at WUSTL. He joined the faculty here in 1957 but left for Yale University in 1964 to become the Charles Stille Professor and create the Yale Center for Parliamentary History.

Hexter returned in 1978 and was named the John M. Olin Professor for the History of Freedom. For the next 22 years, he taught, conducted research and created his most significant achievements — founding the Center for the History of Freedom and publishing a 15-volume treatise, "The Making of Modern Freedom." In addition, Hexter also published "The Reign of King Pym," "Reappraisals of History" and "On Historians."

Widely regarded for his intellectual contributions, Hexter was a member of the Royal Historical Society, the American Academy of Arts & Sciences and the American Philosophical Society. He had four Guggenheim and two Fulbright fellowships to his credit. In addition, Hexter was a trustee of the Danforth Foundation from 1973-78. He died in 1996.

Allman has three books and numerous articles and reviews to her credit. Among the publications she has authored or co-authored are "TONGNAAB: The History of a West African God," "I Will Not Eat Stone: A Women's History of Colonial Asante" and "The Quills of the Porcupine: Asante Nationalism in an Emergent Ghana, 1954-1957." She also has co-edited The Journal of Women's History as well as two critically received book series, "The Social History of Africa" and "New African Histories." Her professional contributions include serving as a member of the board of directors for the Association for the Study of the Worldwide African Diaspora and for the African Studies Association.

After earning a bachelor's degree in history and a certificate in African studies, Allman earned a graduate certificate in African studies and a doctoral degree in African history.

Prior to joining the University, Allman directed the Center for African Studies at the University of Illinois at Urbana-Champaign from 2003-07. She began her academic career at the University of Missouri then moved to the University of Minnesota.

MARY BUTKUS

Chancellor Mark S. Wrighton installed Jean Allman, Ph.D., as the inaugural J.H. Hexter Professor in the Humanities in Arts & Sciences Feb. 12 with the aid of Edward S. Macias, Ph.D., executive vice chancellor, dean of Arts & Sciences and the Barbara and David Thomas Distinguished Professor in Arts & Sciences. "Like Jack Hexter, Jean Allman has excelled in her field of study and will add a valuable dimension to the history department," Macias said.

Volunteers needed for public health drill at WUSTL

By Jessica Daues

The Department of Environmental Health & Safety is asking for faculty, staff and student volunteers to participate in a Strategic National Stockpile (SNS) drill March 18.

The purpose of the drill is to ensure that the St. Louis County Department of Health has the capability to get life-saving drugs to the University population in a public health crisis, such as a flu epidemic, bioterrorism attack or meningitis outbreak.

Up to 700 volunteers are needed to both pose as caregivers and patients during the exercise, which will take place in the Gargoyle in the Mallinckrodt Student Center from noon-4 p.m. To sign up, visit communityservice.wustl.edu/publichealthdrill.

Volunteers to be patients can sign up for up to four one-hour time slots, beginning at noon. Shifts may take one to two hours. Caregivers can sign up in three shifts, starting at 11 a.m., and may be asked to attend a voluntary training session.

Those volunteering to serve as patients and caregivers will be entered into three drawings for an iPod Shuffle, Creative Zen V Plus digital player or a SanDisk Sansa Clip digital player.

"The University's participation in this drill helps us ensure that the WUSTL campus is prepared for a public health emergency situation," said Mark Bagby, University Disaster Coordinator. "We are appreciative of those in the campus community willing to assist us in keeping the campus a safe place for all to work, study and live."

To ensure that St. Louis County and the University is prepared to serve the needs of the campus, those acting as patients will be asked to role-play as they travel through the medication-dispensing process. Upon entering the Gargoyle, volunteers will be given a card that presents them with a fictitious "patient." The card lists an age, symptoms, medical background and other information.

The University is collaborating with the St. Louis County Department of Health in holding the WUSTL SNS drill. Other SNS drills will be held that day in the city of St. Louis and St. Louis, Jefferson and St. Charles counties.

The purpose of the SNS program, established by the federal government in partnership with state and local governments, is to collect and distribute medicine and medical supplies to the American public in a public health emergency.

For more information or to sign up, visit communityservice.wustl.edu/publichealthdrill.

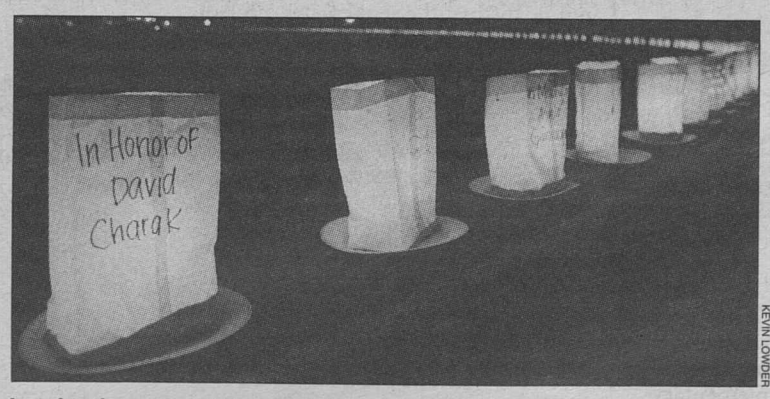
Relay For Life to raise money for cancer research

By Neil Schoenherr

The annual WUSTL Relay For Life will be held at Bushyhead Track March 1-2.

The relay is a 12-hour family-friendly event that raises funds for the American Cancer Society. Last year, the event attracted 2,038 volunteers who helped to generate more than $311,000 for cancer research, advocacy, patient services and education — the highest amount of money per student among universities with enrollment of 10,000-15,999, according to the American Cancer Society.

Teams of 8-15 people raise money beforehand, and through the course of the night have at least one team member walking, jogging or running around the track. In addition, teams decorate campsites, participate in games and activities, including "Relay Idol" and the "Kiddie Karnival," and enjoy entertainment from student performance groups and outside artists.



KEVIN LONDER

Luminaries around the track honor those affected by cancer.

Throughout the night, individuals who have been touched by cancer — patients, survivors and caregivers — will be remembered and honored.

Relay For Life is one of the premier fundraising events for the American Cancer Society. Opening ceremonies begin at 6 p.m. March 1 at Francis Field.

For more information on the event, to volunteer or to donate money to the American Cancer Society, visit relay.wustl.edu or e-mail relay@sugroups.wustl.edu.

Aid

– from Page 1

"Washington University has a long tradition of working individually with the families of our students to customize a financial aid award that ensures cost does not stand in the way of making a Washington University education a reality," Wrighton said.

"This new initiative and its goal of helping families with the most need will not lessen our desire, responsibility or ability to work with all of our families to ensure they have the financial resources they need to send their sons and daughters to Washington University. We remain committed to a flexible and independent approach to delivering financial aid to those who need it most."

This commitment is over and above the $60 million the University already has committed to its financial aid programs.

Parents are being notified of the program this week in a letter from Wrighton. The text of the letter follows:

Dear Washington University Parent:

I am pleased to inform you of an important new initiative at Washington University that will further increase the ability of students with demonstrated family financial need to live and learn on the Danforth Campus.

Although the University has a long and committed history of working with each of our families on an individual basis to help them finance the educations of their sons and daughters, we have been considering more effective ways to further lighten the burden of parents with the least ability to pay for college. We believe we have a special obligation to help those parents with the most financial need, and so it is rewarding to announce that Washington University is eliminating need-based loans as part of its undergraduate financial aid awards to students from low- and middle-income families. For more details on the new initiative, please see the enclosed news release.

A Washington University education is, without a doubt, one of the most expensive investments one will ever make, but it is also one that we trust and know by experience will pay great dividends for its recipients. Whatever fraction of our "sticker price" you are paying, I know that your financial investment is a large one. However, it is important to note that through both current gifts and earlier gifts of endowment by generations of alumni, friends, foundations and corporations we are able to provide a higher quality educational experience than current families support. We will continue to develop resources so that we will remain at the forefront of educating and engaging the most talented students.

As always, any student facing financial challenges should visit Student Financial Services in North Brookings to discuss the possibility of additional support.

I thank you once again for entrusting your sons and daughters to Washington University. It is a responsibility we never take for granted, a responsibility that is our daily reminder of the importance of our work. Please know that we remain committed to their welfare, to the excellence of their educational experiences, and to ensuring that the Washington University experience is available to all who are qualified and who desire to share these essential and formative years of their life with us.

Sincerely yours,
Mark S. Wrighton
Chancellor

School of Medicine Update

Chemical chaperone could open door to treatment of neurological disorder

BY GWEN ERICSON

An unexpected finding turned out to be a clue leading School of Medicine researchers to propose a new treatment approach for Niemann-Pick disease, a rare, deadly neurodegenerative disorder.

To overcome the genetic defect in Niemann-Pick disease, the researchers suggest that chemical compounds could potentially "chaperone" mutant protein molecules through the cell's quality control machinery. And they believe the approach also could be useful for more common diseases, such as cystic fibrosis, that stem from a similar type of defect.

Their findings are reported in advance online publication in the Journal of Biological Chemistry.


Ory

Daniel S. Ory, M.D., associate professor of medicine, and colleagues in the Center for Cardiovascular Research originally began to study Niemann-Pick type C disease because of its link to cholesterol metabolism, as the genetic abnormality at the root of the disease serves as a tool for investigating how cholesterol moves about in cells.

Niemann-Pick type C, the rarest form of Niemann-Pick disease, usually affects school-aged children, but the disease may occur at any time from early infancy to adulthood. Symptoms may include unsteadiness of gait, clumsiness, slurred speech, learning difficulties, progressive intellectual decline, seizures and tremors. Niemann-Pick type C disease is fatal, and no life-extending treatment exists.

As the result of their latest research, Ory and colleagues want to investigate a different treatment modality than has previously been proposed. The group believes that Niemann-Pick type C and other diseases like it might be treated more readily with chemical compounds able to compensate for the effect of the disease's underlying genetic mutation.

Niemann-Pick type C disease is a recessive inherited trait that can originate in one of more than 200 different mutations in the NPC1 gene, which lies on chromosome 18. The mutations lead to production of abnormal NPC1 protein. Normally, NPC1 protein plays an essential role in moving cholesterol out of cells, and if it doesn't function, cholesterol and other lipids accumulate.

Most scientists assumed that Niemann-Pick type C mutations produced NPC1 protein that didn't work correctly. So when a routine test in the Ory lab of a mutated NPC1 protein showed that the protein was in fact active in living cells, the researchers did a double take.

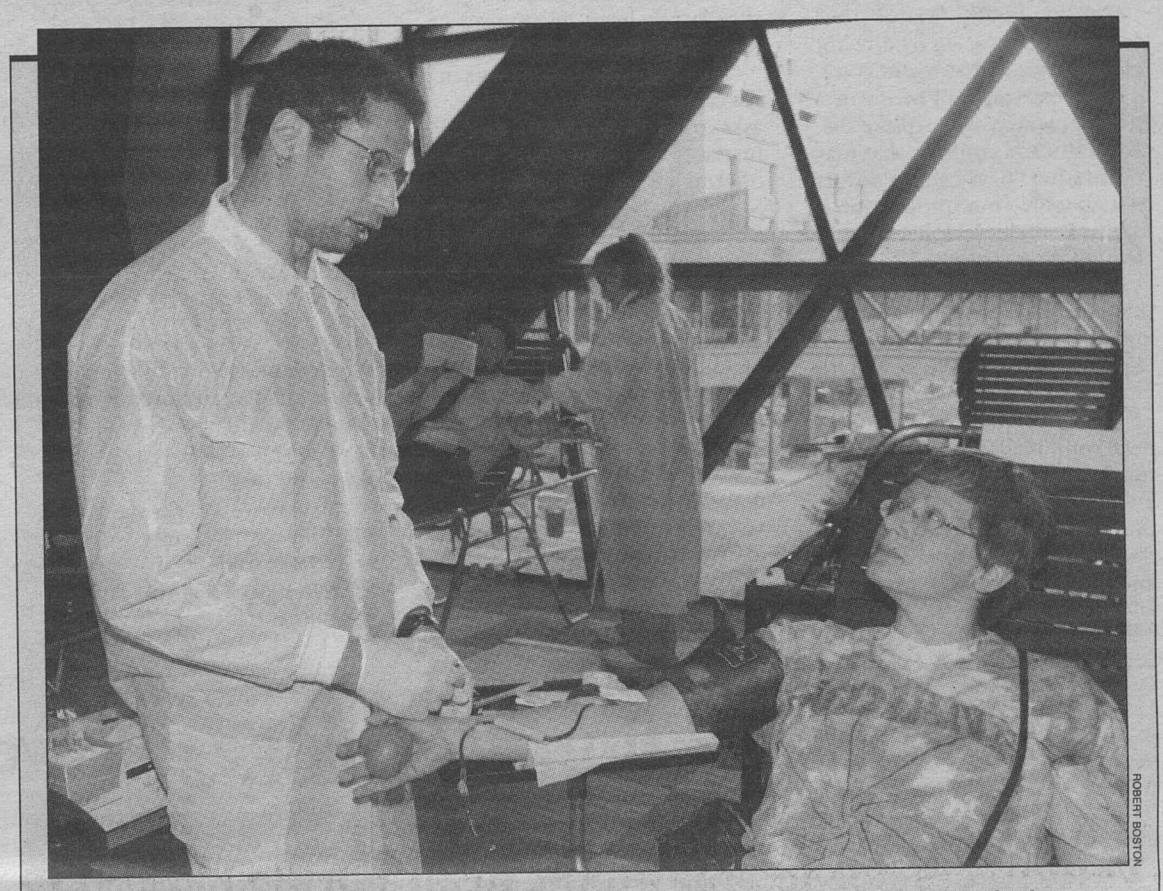
"It is unequivocal that the mutation causes disease in human patients," said Ory, also associate professor of cell biology and physiology. "Yet, the mutated protein seemed functional when we introduced it into cells."

When looking for the explanation, Ory and colleagues found that a small proportion of the mutant protein actually could do the job of normal NPC1 protein. It turned out that the mutation caused most newly minted NPC1 protein molecules to fold into the wrong shape or to assume their final shape slowly so that the cell's quality control checkpoints rejected them. But some of the mutant protein molecules assumed the correct shape and made it to their proper destination.

That suggested to the team that Niemann-Pick type C disease possibly could be treated with chemicals that assist the mutant proteins produced in patients. Ory refers to these as chemical chaperones and indicates this approach could help the large NPC1 proteins during the process of folding their long, complex chains so that more of the mutant proteins fold properly and pass through the cell's quality control checkpoints.

In collaboration with the National Institutes of Health Chemical Genomics Center, Ory will next screen more than 200,000 compounds to see which ones increase the amount of mutant NPC1 that folds into a functional form.

"Then we will bring the compounds that show a positive effect to our laboratory and validate them on cell lines from Niemann-Pick patients, then we will work with a pharmaceutical partner to take the ones that are effective in cells and make sure they will be safe and effective in people," Ory said.


ROBERT BOSTON

Helping to save a life Chris Stander, who manages the lab of Andrey Shaw, M.D., in the Department of Pathology and Immunology, gives blood in the Clinical Sciences Research Building link at the recent blood drive. While talking with phlebotomist Gary Kennedy, Stander said she has been giving blood about six times per year for more than 10 years. The Jan. 29 University-wide blood drive collected 415 productive units of blood, of which 86 came from the two School of Medicine locations.

Outreach program offers free health assessments to older adults

BY JIM DRYDEN

Medical professionals from Washington University and Goldfarb School of Nursing at Barnes-Jewish College are helping older adults in underserved areas of St. Louis identify and address wide-ranging health problems — from osteoporosis and frailty to impaired physical function and depression.

The Barnes-Jewish Hospital Foundation is funding the program, called the Collaborative Assessments to Revitalize the Elderly in Our Community (CARE in Our Community), for the next three years.

"This program grew out of a successful outreach program initiated in 2005 by the Division of Geriatrics and Nutritional Science at the School of Medicine," said Consuelo H. Wilkins, M.D., assistant professor at the School of Medicine and program director for CARE. "We have provided health assessments and/or interventions to more than 850 St. Louis seniors, primarily those who live in underserved housing complexes. With this funding, we plan to help even more."


Wilkins

The data obtained from the initial outreach program found that impaired physical function caused by obesity, depressed mood and osteoporosis are major contributors to frailty and reduced quality of life. The program will visit community centers and senior-living facilities to perform evaluations and interventions that focus on these areas of concern.

"It's very important to get health providers to these seniors because it's difficult for many to get to the doctor's office for standard medical care, and a large number of these people suffer with treatable problems that go undiagnosed."
CONSUELO H. WILKINS

"We plan to develop and implement interventions to address several risk factors for frailty and will be concentrating in particular on calcium and vitamin D deficiency, impaired physical function and depressed mood," Wilkins said. "It's very important to get health providers to these seniors because it's difficult for many to get to the doctor's office for standard medical care, and a large number of these people suffer with treatable problems that go undiagnosed."

The CARE program will seek additional funding to improve and expand outreach efforts. This initial grant from the Barnes-Jewish Hospital Foundation provides the program with $275,000 annually for three years.

Disrupting common parasites' ability to communicate reduces infection

BY MICHAEL C. PURDY

One of the most common human parasites, *Toxoplasma gondii*, uses a hormone lifted from the plant world to decide when to increase its numbers and when to remain dormant, School of Medicine researchers have found.

The scientists report in Nature that they successfully blocked production of the molecule, known as abscisic acid (ABA), with a plant herbicide. Low doses of the herbicide prevented fatal *T. gondii* infection in mice.

"As a target for drug development, this pathway is very attractive for several reasons," said author L. David Sibley, Ph.D., professor of molecular microbiology. "Because of its many roles in plant biology, we already have several inhibitors for it. Also, the plant-like nature of the target decreases the chances that blocking it with a drug will have significant negative side effects in human patients."


Sibley

T. gondii's relatives include the parasites that cause malaria, which also appear to have genes for ABA synthesis. The new findings may explain an earlier study where a group of researchers found that the same herbicide inhibits malaria.

Infection with *T. gondii*, or toxoplasmosis, is perhaps most familiar to the general public from the recommendation that pregnant women avoid changing cat litter. Cats are commonly infected with the parasite, as are some livestock and wildlife. Humans also can become infected by eating undercooked meat or by drinking water contaminated with spores shed by cats.

Epidemiologists estimate that as many as one in every four humans is infected with *T. gondii*. Infections are typically asymptomatic, only causing serious disease in patients with weakened immune systems. In some rare cases, though, infection in patients with healthy immune systems leads to serious eye or central nervous system disease, or congenital defects in the fetuses of pregnant women.

Scientists have known for about a decade that protozoan parasites like *T. gondii* and those that cause malaria contain many plant-like pathways, or groups of genes or proteins put to use for a particular biological task. An earlier revelation led to ongoing efforts to develop drugs that block plant-like proteins parasites use to synthesize metabolically important structures or compounds. However, until this study, no one had found the parasites using a plant-like protein for signaling purposes.

"Signals are sometimes even better targets for drug development than biosynthetic pathways," said Sibley. "Taking out a biosynthetic pathway means you take away one thing from the parasite. But if you can successfully disable a key signal, this may potentially disrupt many more aspects of the parasite's metabolism."

Kisaburo Nagamune, Ph.D., formerly a postdoctoral fellow in Sibley's laboratory, found the ABA pathway in *T. gondii* while searching the parasite's genome for pathways linked to calcium signaling. A series of experiments led by Nagamune, now an assistant professor at Tsukuba University in Japan, showed that ABA helps the parasites control their reproductive cycle by communicating with each other in the host cell. When they sense high enough levels of ABA, the parasites break out of host cells; otherwise, they stay in the host cell and remain dormant.

With help of online databases and botanists at the Donald Danforth Plant Science Center in St. Louis and elsewhere, researchers quickly identified a class of herbicides that block ABA production and that are already in use commercially and screened for low toxicity to animals.

Scientists tested one of those herbicides against toxoplasmosis, labeling the test parasites with the firefly luciferase protein. Whole animal imaging showed that treatment with the herbicide reduced the number of parasites in infected mice during the initial infection and also reduced the chronic burden.

University Events

'Lizzie Borden' presents fact, legend and Freud

BY LIAM OTTEN

Lizzie Borden took an ax
And gave her mother 40 whacks
When she saw what she had done
She gave her father 41

So goes the well-known nursery rhyme, though the victims were actually Borden's father and stepmother. And more than 100 years after that infamous double murder, Borden — who was acquitted of the crime — remains the chief suspect.

This month, the Washington University Opera, led by director Jolly Stewart, instructor in voice in the Department of Music in Arts & Sciences, will explore the characters and conflicts that may (or may not) have caused Borden to snap with a new production of "Lizzie Borden," Jack Beeson's acclaimed three-act opera.

Performances, sponsored by the music department, begin at 8 p.m. Friday and Saturday, Feb. 22 and 23, in Edison Theatre.

Set in 1892 in Borden's home of Fall River, Mass., "Lizzie Borden" combines fact, legend and a touch of Freudian analysis to create one plausible explanation for the tragedy. The story centers on the relationship between Lizzie and her younger sister, Margret, with their domineering father and stepmother, Andrew and Abigail.

"Andrew is the richest man in town and very, very strict," Stewart said. "Abigail is the quintessential wicked stepmother, always smiling but also taking every opportunity to malign the girls and treat them like slaves. Lizzie and Margret are almost prisoners in their own home."

Andrew is not only strict, but he's also abusive. "Andrew abuses everybody verbally," Stewart said, "but we feel that Lizzie has been sexually abused as well, though she's largely been able to protect Margret."

Events come to a head when a sea captain, Jason MacFarlane, asks Andrew for permission to marry Margret. Andrew refuses, offering Lizzie instead. Jason and Margret make secret plans to elope, but Lizzie — unhinged by abuse and fury, sensing the possibility of escape — begins to fantasize that Jason will return for her.

"One of the most interesting things about staging opera is the need to get inside people's heads, to understand why they do what they do," Stewart said. "In that sense, 'Lizzie Borden' represents the supreme challenge."

Originally commissioned by the Ford Foundation, "Lizzie Borden" premiered March 25, 1965, at the New York City Opera. Beeson's music — partially inspired by the nursery rhyme — captures Lizzie's mounting anxiety through its striking use of dissonance and atonality, though the mood is leavened by more lyrical moments and by darting allusions to period hymns and parlor songs. The English libretto is by Kenward Elmsie, based on a scenario by Richard Plant.

The cast of six is led by WUSTL alumni Debra Hillabrand and Nathan Ruggles — both teachers of applied music in voice — as Lizzie and Andrew. Graduate students Courtney Dey and Alan Naylor play Margret and Jason. Rounding out the cast are junior Alison Moritz as Abigail and graduate student Joshua Stanton as Reverend Harrington, who accompanies MacFarlane to the Borden home.

John Stewart, director of vocal activities in the Department of Music in Arts & Sciences, conducts the performance, which will feature the St. Louis Symphony Youth Orchestra as well as the eight-member Kirkwood Children's Chorus. Sets and lighting are by Patrick Huber, with costumes by Teresa Dogge.

Tickets are $18 for the public; $12 for seniors, faculty and staff; and $7 for students. For more information, call 935-6543 or visit edisontheatre.wustl.edu.

DAVID KILPER

As the title character in "Lizzie Borden," Debra Hillabrand has the challenge of getting inside the head of an accused murderer.

Sufism • Climate Change • Preventing Prematurity

"University Events" lists a portion of the activities taking place Feb. 21-March 5 at Washington University. Visit the Web for expanded calendars for the Danforth Campus (webevent.wustl.edu) *and the School of Medicine* (medschool.wustl.edu/calendars.html).

Exhibits

"Thaddeus Strode: Absolutes and Nothings." Through April 21. Kemper Art Museum. 935-4523.

"On the Margins." Through April 21. Kemper Art Museum, 935-4523.

"Weitman Exhibition." Inaugural exhibition showcasing more than three dozen photographs of Herb Weitman, longtime head of Photographic Services. Through mid-March. Sam Fox School Weitman Gallery. 935-6500.

"Disappearing Shanghai: An Installation of Photographs by Howard French." Through March 3. Kemper Art Museum. 935-4448.

Film

Wednesday, Feb. 27

7 p.m. Science on Tap Film & Discussion. "Video Surveillance: Fact and Fiction." Robert Pless, assoc. prof. of computer science. Schlafly Bottleworks, Crown Rm., 7260 Southwest Ave. 935-5285.

Thursday, Feb. 28

7:30 p.m. Kemper Art Museum Film Screening. "Protest." From Season 4 of the PBS series Art:21-Art in the Twenty-First Century. Steinberg Aud. 935-4523.

Monday, March 3

7 p.m. Jewish, Islamic and Near Eastern Middle East Film Series. "Nasser 56." Wilson Hall, Rm. 214. 935-8567.

Lectures

Thursday, Feb. 21

8 a.m.-5 p.m. School of Medicine Guze Symposium on Alcoholism. "Alcohol, Suicide and Suicidality." Cost: $100; free for WUSTL faculty, staff, postdocs and students. Eric P. Newman Education Center. 286-2244.

Noon. Genetics Seminar. "Cytosine Methylation: Control and Variation." Eric J. Richards, prof. of biology. McDonnell Medical Sciences Bldg., Rm. 823. 362-2139.

4 p.m. Chemistry Seminar. "Applications for Ultra-thin Polymer Films Assembled on Flexible Substrates." Adam Nolte, postdoctoral researcher, National Inst. of Standards & Technology. McMillen Lab., Rm. 311. 935-6530.

4 p.m. Vision Science Seminar Series. "Apoptosis and Tolerance: The Role of Caspase-Induced Mitochondrial Disruption." Hirotaka Kazama, staff scientist, ophthalmology & visual science. Maternity Bldg., Rm. 725. 362-3315.

4:15 p.m. Earth & Planetary Sciences Colloquium. "The Formation of Ganymede's Grooved Terrain." Michael Bland, graduate research assoc. of lunar & planetary lab., The U. of Ariz. Earth & Planetary Sciences Bldg., Rm. 203. 935-5610.

Friday, Feb. 22

9 a.m.-1 p.m. Center for the Study of Ethics & Human Values Symposium. "The Ethics of Performance Enhancement in Sport." Thomas Murray, pres. of The Hastings Center. Anheuser-Busch Hall. 935-9358.

9:15 a.m. Pediatric Grand Rounds. "Brain Machine Interfaces: Tapping Into Different Levels of Cortical Activity." Daniel W. Moran, asst. prof. of biomedical engineering. Clopton Aud., 4950 Children's Place. 454-6006.

11 a.m. Computer Science & Engineering Colloquium. "Recent Progress in Heuristic Search: A Case-Study of the 4-Peg Towers of Hanoi Problem." Richard E. Korf, prof. of computer science, UCLA. Cupples II Hall, Rm. 217. 935-6160.

11 a.m. Energy, Environmental & Chemical Engineering Seminar Series. "Novel Nanomaterials from Fast Laser-Induced Self-Organization: Applications to Solar Harvesting and Magnetism." Ramki Kalyanaraman, asst. prof. of physics. Lopata Hall, Rm. 101. 935-5548.

Noon. Cell Biology & Physiology Seminar. "Myosin VI In Vivo: What Properties are Important for its Function?" Kathryn G. Miller, prof. of biology. McDonnell Medical Sciences Bldg., Rm. 426. 362-6630.

3 p.m. Association of Women Faculty Colloquium. "The Science and Law of Climate Change." Barbara Schall, prof. of biology, and Maxine Lipeles, dir. of the Interdisciplinary Environmental Clinic. Brown Hall Lounge. 935-6160.

How to submit 'University Events'

Submit "University Events" items to Angela Hall of the Record staff via:

e-mail — recordcalendar@wustl.edu

campus mail — Campus Box 1070

fax — 935-4259

Upon request, forms for submitting events will be e-mailed, mailed or faxed to departments to be filled out and returned.

Deadline for submissions is noon the Thursday prior to publication date.

Saturday, Feb. 23

7:30 a.m.-12:40 p.m. Cardiovascular Disease CME Course. "10th Annual Update in Cardiovascular Diseases and Hypertension." Cost: $75. St. Louis Marriott West, 660 Maryville Centre Drive. To register: 362-6891.

11 a.m. MLA Saturday Seminar Series. "The Politics of Reproductive Rights and Motherhood." Susan Frelich Appleton, prof. of law. McDonnell Hall, Goldfarb Aud. 935-6700.

Monday, Feb. 25

8 a.m.-5 p.m. St. Louis STD/HIV Prevention Training Center Course. "STD Intensive." (Continues 8 a.m.-5 p.m. Feb. 26 & 27.) Cost: $125. For location and to register: 747-1522.

10 a.m. School of Law Lecture. "U.N. War Crimes Tribunals: Do They Help or Hinder Achieving Peace and Justice?" Larry Johnson, asst. secretary-general. Anheuser-Busch Hall, Rm. 309. 935-7988.

Noon. Center for the Study of Ethics & Human Values Lecture Series. "Where Clinical Ethical Tools Matter Most: Healthcare Disparities Near Life's End." September Williams, physician & filmmaker. West Pavilion Amphitheater, Barnes-Jewish Hosp. 935-9358.

Noon. Work, Families and Public Policy Brown Bag Seminar Series. "People, Property and Patriarchy: The Evolution of Rights Over Human Capital." Nancy Folbre, prof. of economics, U. of Mass. Amherst. Eliot Hall, Rm. 300. 935-4918.

3 p.m. School of Law Guest Lecture. "U.N. War Crimes Tribunals: Do They Help or Hinder Achieving Peace and Justice?" Larry Johnson, asst. secretary-general. Anheuser-Busch Hall, Rm. 403. 935-7988.

4 p.m. Center for the Study of Ethics & Human Values Lecture Series. "Transforming the Legacy: Ethical Issues in the U.S. Public Health Service Syphilis Study on the Negro Male." September Williams, physician & filmmaker. Duncker Hall, Rm. 201, Hurst Lounge. 935-9358.

4 p.m. Eighteenth-Century Interdisciplinary Salon Lecture. "Rethinking the Enlightenment: Nature and Culture in the High and Late Enlightenment." Peter Reill, prof. history, UCLA. (Reception follows.) Women's Bldg. Formal Lounge. 935-5175.

4 p.m. Immunology Research Seminar Series. Jonathan Green, assoc. prof. of medicine. Farrell Learning & Teaching Center, Connor Aud. 362-2763.

4 p.m. Siteman Cancer Center Seminar. "Young Women's Breast Cancer Program: Challenges, Opportunities and Advances in Clinical Care and Research." Paul Goodfellow, prof. of surgery & genetics, and Jennifer Ivanovich, research instructor of surgery. Center for Advanced Medicine, Farrell Conference Rm. 2. 454-8981.

5:30 p.m. Cardiac Bioelectricity & Arrhythmia Center Seminar. "Heterogeneity of Cellular Ca2 Cycling in Intact Failing Rat." J. Andrew Wasserstrom, assoc. prof. of medicine, Northwestern U. (5 p.m. reception.) Whitaker Hall, Rm. 218. 935-7887.

6:30 p.m. Architecture Lecture Series. Kostas Terzidis, assoc. prof. of architecture, Harvard Graduate School of Design. (6 p.m. reception, Givens Hall.) Steinberg Aud. 935-9300.

Tuesday, Feb. 26

8 a.m.-4:30 p.m. Center for the Application of Information Technology Workshop. "Project Management Simulation." (Continues 8 a.m.-4:30 p.m. Feb. 27 & 28.) Cost: $1,560, reduced fees available for CAIT member organizations. CAIT, 5 N. Jackson Ave. 935-4444.

Noon-4:30 p.m. Annual Postdoc Scientific Symposium. Günter Wagner, prof. of ecology & evolutionary biology, Yale U. (Reception follows.) Eric P. Newman Education Center. To register: 362-2591.

Noon. Center for the Study of Ethics & Human Values Lecture Series. "Clinical Ethics, End of Life Care, and Healthcare Disparities." September Williams, physician & filmmaker. Moore Aud., 660 S. Euclid Ave. 935-9358.

Noon. Molecular Microbiology & Microbial Pathogenesis Seminar Series. "Protein Misfolding Done Right: The Biogenesis of Bacterial Amyloid Fibers." Matt Chapman, prof. of microbiology, U. of Mich. Cori Aud., 4565 McKinley Ave. 362-6772.

Thursday, Feb. 28

Noon. Genetics Seminar. "Using C. elegans to Dissect Cell Division Mechanisms." Karen F. Oegema, asst. prof. of cellular & molecular medicine, U. of Calif., San Diego. McDonnell Medical Sciences Bldg., Rm. 823. 362-2139.

4 p.m. Chemistry Seminar. "New Building Blocks and Tools for Molecular Self-Assembly." Darren Hamilton, assoc. prof. of chemistry, Mount Holyoke College. McMillen Lab., Rm. 311. 935-6530.

4 p.m. History Colloquium. "Taxonomies of Inheritance: Jewish Texts in al-Andalus." David Wasserstein, prof. of history & Jewish studies, Vanderbilt U. (Reception follows.) Co-sponsored by Jewish, Islamic & Near Eastern Studies. Duncker Hall, Rm. 201, Hurst Lounge. 935-5450.

4 p.m. Vision Science Seminar Series. "Aldo-Keto Reductases in Stress and Inflammation." J. Mark Petrash, prof. of ophthalmology & visual sciences and genetics. Maternity Bldg., Rm. 725. 362-3315.

4:15 p.m. Earth & Planetary Sciences Colloquium. "Dynamics of Electron Transfer at Environmental Interfaces." Kevin Rosso, assoc. dir. of environmental dynamics & simulation, William R. Wiley Environmental Molecular Sciences Lab. Earth & Planetary Sciences Bldg., Rm. 203. 935-5610.

8 p.m. The Writing Program Fall Reading Series. Michael Palmer, author, will read from his poetry. Duncker Hall, Rm. 201, Hurst Lounge. 935-7130.

Friday, Feb. 29

8 a.m.-6 p.m. School of Medicine Symposium. In Honor of Eugene M. Johnson Jr., Ph.D. "Life, Death and the Renewal of the Neuron: The Leap from Bench to Bedside." (5:15 p.m. reception.) Eric P. Newman Education Center. 362-8658.

9:15 a.m. Pediatric Grand Rounds. "Preventing Prematurity: Exploring Human Diversity to Improve Child Health." Louis J. Muglia, prof. of molecular biology & pharmacology. Clopton Aud., 4950 Children's Place. 454-6006.

11 a.m. Energy, Environmental & Chemical Engineering Seminar Series. "Energy Efficiency for Natural Gas Consumption in U.S. Industries." Kayva Shala, independent consultant, U. of Mo., Columbia. Lopata Hall, Rm. 101. 935-5548.

Therapy through dance: Irish company CoisCéim brings 'Knots' to Edison

BY LIAM OTTEN

As singles, we spend much of our lives looking for the perfect partner with whom to "tie the knot." Once we've found them, we spend the rest of our lives looking to repair the frayed ends.

Such is the thesis behind "Knots," an evening-length concert by CoisCéim (pronounced Kush Came), one of Ireland's leading contemporary dance companies.

Directed by guest choreographer Liam Steel, the acclaimed show — voted best production at the 2005 Dublin Fringe Festival — will make its St. Louis debut as part of the Edison Theatre OVATIONS! Series at 8 p.m. Feb. 29 and March 1.

"Knots" is based on the writings of R.D. Laing, a psychoanalyst whose 1970 book of the same title, inspired by his work in couples' therapy, examines the ways in which our minds frequently interfere with our personal relationships.

"Some years ago, I was dealing with the painful breakdown of a personal relationship," Steel said. "I had been with my partner for five years and came home one day to find a 'Dear John' note on our table saying that they had gone. They had left me for someone else. Naturally I was hurt, angry, upset and bitter. But, ultimately, I just wanted to know why?"

Laing's work, which Steel discovered shortly thereafter, "led me to a level of self-examination that showed me that I had reached an impasse — a knot that had to be untangled in order for me to move on and be able to form a successful relationship in the future."

A few years later, Steel was approached by David Bolger, co-founder and artistic director of CoisCéim, about creating a piece.

"'Knots' seemed to lend itself perfectly to creative dissection," Steel said. "It is written with a musical rhythm that shows it to be a perfect bed partner to dance. And, yet, it defies definition. Is it poetry, theatre, philosophy, psychology or simply the confused ramblings of a controversial psychoanalyst?"

The resulting concert fuses text and movement into high-octane and sometimes brutal choreography representing a series of passionate physical and verbal confrontations.

Performed by a six-person company, "Knots" attempts to unravel the dynamic twists, turns and convolutions of life with another person.

"This exhilarating devised production … is the most accomplished to date in CoisCéim's ongoing project to merge the aesthetics and skills of contemporary dance and theatre," wrote The Guardian newspaper.

"The performers astound in their ability to perform complex choreography while acting with complete emotional commitment. Their vivacity undercuts what could otherwise have become a bleak vision of the possibility of happy union," the newspaper stated.

Steel, in addition to creating "Knots," serves as artistic director for the company Stan Won't Dance, which recently completed a North American tour for its debut piece, "Sinner." He previously spent 10 years as a performer, assistant director and designer for DV8 Physical Theatre and also has performed and choreographed for theaters and companies throughout the United Kingdom.

COURTESY PHOTO

Who needs a marriage counselor when you can spend a night at Edison? Irish dance company CoisCéim explores the twists and turns of intimate relationships at Edison Theatre Feb. 29 and March 1.

CoisCéim — from the Irish word for "footstep" — was launched in 1995 and to date has created more than 20 dance theater works, ranging from duets to large ensemble pieces that combine a sense of fun and vitality with a depth of emotion and poignancy.

In addition to stage works, the Dublin-based troupe has begun creating site-specific pieces such as "Swept," which was made for and presented in a hotel bedroom.

Their 2001 film "Hit and Run," shot on location around Dublin, has been screened at more than a dozen national and international film festivals as well as on network television.

Other projects include choreographing a piece involving 75,000 people for the opening of the 2003 Special Olympics in Ireland.

Last September they presented "Intimate Details," a dance spectacle created for the opening ceremony of the Ryder Cup.

Tickets — $30 to the public; $25 for seniors, faculty and staff; and $18 for students and children — are available at the Edison Theatre Box Office and through all MetroTix outlets.

For more information, call 935-6543 or e-mail Edison@wustl.edu.

Hear Beethoven sonatas in Holmes Lounge Feb. 23

BY LIAM OTTEN

Christina Mahler, principal cellist for Toronto's Tafelmusik Baroque Orchestra, will join fortepianist Seth Carlin, professor of piano and fortepiano in the Department of Music in Arts & Sciences, for a performance of three Beethoven masterpieces at 8 p.m. Saturday, Feb. 23 in Ridgley Hall, Holmes Lounge.

Presented by The Kingsbury Ensemble, St. Louis' leading early-music group, the program (previously scheduled for March 22) will feature Beethoven's Opus 5, No. 2; Opus 69; and Opus 102, No. 1 played on period instruments for the first time in St. Louis.

Sonatas for cello and fortepiano were a new instrumental form in the late 18th and early 19th century. Beethoven used sonatas as musical experiments that would later enter his orchestral work, with influences of Haydn and Mozart competing with later Romantic themes.

But most of all, Beethoven's sonatas for violoncello and fortepiano treat the two instruments as equal partners. "There's a better equilibrium between the two," said Carlin, who serves as fortepianist with The Kingsbury Ensemble. "The modern piano tends to dominate the cello. Original instruments help restore the balance which Beethoven had in mind."

Carlin has performed with orchestras around the world and with conductors such as Nicholas McGegan, Leonard Slatkin and Roger Norrington. In 1991-92 he performed the complete Schubert fortepiano sonatas in New York City — concerts that were broadcast nationally on National Public Radio. More recently he appeared as soloist with the Saint Louis Symphony Orchestra in Beethoven's "Triple" Concerto as well as with San Francisco's Philharmonia Baroque, the period-instrument orchestra.

COURTESY PHOTO

Christina Mahler will perform Beethoven on the period instrument violoncello.

Mahler, a native of Holland, studied at the Royal Conservatory in The Hague and, in 1981, immigrated to Canada to join the Tafelmusik orchestra, where she has served as principal cellist ever since. She has played and recorded numerous concertos with Tafelmusik, including works by Boccherini, Haydn, Vivaldi, Bach and Leonardo Leo. She also is member of the Ottawa-based string quartet Quatuor Lumiere.

Tickets are $15; $10 for seniors and $5 for students and are available through the Edison Theatre box office at 935-6543 and at the door.

For more information, call 862-2675 or visit kingsburyensemble.org.

Noon. Cell Biology & Physiology Seminar. "Regulation of Nuclear Transport." Susan Wente, prof. of cell & developmental biology, Vanderbilt U. McDonnell Medical Sciences Bldg., Rm. 426. 362-6630.

4 p.m. Dept. of Music Lecture Series. "Fictions of the Prima Donna." Phyllis Weliver, asst. prof. of humanities, Saint Louis U. Music Classroom Bldg., Rm. 102. 935-4841.

Monday, March 3

6:30 p.m. Architecture Lecture Series. Thom Mayne, Morphosis, Santa Monica, Calif. (6 p.m. reception, Givens Hall.) Steinberg Aud. 935-9300.

Tuesday, March 4

Noon. Assembly Series. "Race and the Roberts Court." Charles Ogletree, prof. of law, Harvard Law School. Graham Chapel. 935-5285.

4:15 p.m. Jewish, Islamic and Near Eastern Studies Colloquium. "Sufism." Ahmet T. Karamustafa, prof. of history. Ridgley Hall, Rm. 219. 935-8567.

8 p.m. The Writing Program Fall Reading Series. Michael Palmer, author, speaks on the craft of poetry. Duncker Hall, Rm. 201, Hurst Lounge. 935-7130.

Wednesday, March 5

4:30 p.m. Assembly Series. "From Quantum to Consciousness: Does Emergence Support the Language of Spirit?" Philip Clayton. Whitaker Hall Aud. 935-5285.

Music

Thursday, Feb. 21

8 p.m. Jazz at Holmes. Jan Shapiro, vocalist, and Bill Lenihan, guitar. Ridgley Hall, Holmes Lounge. 935-5566.

Friday, Feb. 22

6 p.m. Kemper Presents Concert Series. Mmmelt. Kemper Art Museum. 935-4448.

Saturday, Feb. 23

8 p.m. The Kingsbury Ensemble. Ridgley Hall, Holmes Lounge. 935-5566.

Wednesday, Feb. 27

8 p.m. Jazz Band. Ridgley Hall, Holmes Lounge. 935-5566.

Thursday, Feb. 28

8 p.m. Jazz at Holmes. Kara Baldus, piano. Ridgley Hall, Holmes Lounge. 935-5566.

Friday, Feb. 29

7:30 p.m. Trinity Piano Trio. Recital Hall, 560 Trinity Ave. 935-4841.

Monday, March 3

8 p.m. Saint Louis Symphony Orchestra Concert. E. Desmond Lee Concert Hall, 560 Trinity Ave. 935-4841.

Tuesday, March 4

8 p.m. Student Recital. Recital Hall, 560 Trinity Ave. 935-4841.

On Stage

Friday, Feb. 22

8 p.m. Performing Arts Dept. Presentation. "She Stoops To Conquer." (Also 8 p.m. Feb. 23, 29 & March 1; 2 p.m. Feb. 24 & March 2.) Cost: $15, $9 for seniors, WUSTL students, faculty & staff. A.E. Hotchner Studio Theatre. 935-6543.

8 p.m. Washington University Opera Production. "Lizzie Borden." (Also 8 p.m. Feb. 23.) Cost: $18, $12 for seniors, WUSTL faculty & staff, $7 for students. Edison Theatre. 935-6543.

Friday, Feb. 29

8 p.m. OVATIONS! Series. "Knots." (Also 8 p.m. March 1.) Cost: $30, $25 for seniors, WUSTL faculty & staff, $18 for students & children. Edison Theatre. 935-6543.

Sports

Friday, Feb. 22

6 p.m. Women's Basketball vs. Brandeis U. Athletic Complex. 935-4705.

8 p.m. Men's Basketball vs. Brandeis U. Athletic Complex. 935-4705.

Sunday, Feb. 24

Noon. Men's Basketball vs. New York U. Athletic Complex. 935-4705.

2 p.m. Women's Basketball vs. New York U. Athletic Complex. 935-4705.

Sports

Men's basketball improves to 18-4

The No. 7 men's basketball team improved to 18-4 overall with two University Athletic Association (UAA) wins on the road last weekend.

Senior Troy Ruths scored a game-high 25 points, including a pair of free throws with 6.8 seconds remaining to lead the Bears to a 71-68 victory at Case Western Reserve University Feb. 15. Junior Tyler Nading had 19 points and 15 rebounds, picking up the third double-double of his career.

Two days later, Nading scored 19 points to become the 17th player in school history to score 1,000 or more points in a 78-71 overtime win at Emory University. Nading hit a 15-foot jumper with 2:17 left in overtime, pushing him over the 1,000-point plateau.

WUSTL (18-4, 9-2 UAA) opens a two-game home stand against No. 10 Brandeis University Friday, Feb. 22, at 8 p.m.

WUSTL will have a chance to break that tie Friday, Feb. 22, when it hosts Brandeis University in the Field House at 6 p.m.

Men's tennis suffers first loss of season

The No. 7 men's tennis team dropped its first match of the season in a 5-2 loss at Division I Illinois State University Feb. 16.

Freshman Max Woods and junior Nirmal Choradia picked up the lone win in doubles, notching a 9-7 win at the No. 3 spot.

WUSTL picked up two impressive singles victories, as sophomore Danny Levy won at No. 4, 6-4, 6-4, while Choradia posted a 4-6, 7-6, 6-4 come-from-behind victory at the No. 6 spot. Choradia was the lone Bear to post two wins on the day, picking up his 80th career victory.

WUSTL will participate at the 2008 NCAA Division III National Indoor Championships next weekend in St. Peter, Minn. The Bears face No. 6 DePauw University Friday, Feb. 22, in the first round.

Women's hoops face four-way tie for first

The No. 18 women's basketball team went 1-1 during its final University Athletic Association (UAA) road trip, defeating Case Western Reserve, 74-65, Feb. 15, but falling to Emory University, 68-66, Feb. 17.

The loss drops the Bears to 16-6 overall and 8-3 in the UAA. Washington University is now in a four-way tie for first place in the conference with Brandeis University, University of Rochester and University of Chicago.

Track and field teams compete in Wisconsin

The men's and women's track and field teams competed at the University of Wisconsin-Platteville Open Feb. 16.

The men's team picked up a pair of third-place finishes in the distance events.

The women's team also ran well in the distance and middle-distance events. The Bears took the top three spots in the mile run, led by freshman Kelli Blake.

Law

Unique program to help students learn globally

– from Page 1

Shepley University Professor. "Many American law schools are expanding their international curricula and study-abroad programs. Washington University law and Utrecht University are now taking international legal education to the next level."

Unlike traditional international dual-degree programs, WUSTL's transnational law program will be the first to offer:

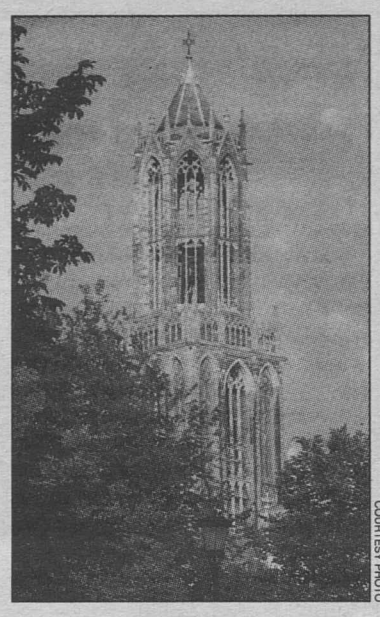
- a targeted, integrated curriculum developed with partner institutions;
- internships with U.S. and European corporations, law firms, courts, enforcement and administrative agencies and nongovernmental organizations;
- ongoing faculty exchanges among the participating schools;
- related courses co-taught by partner and University faculty.

On Tuesday, Feb. 26, leaders from each of the partner universities will gather to officially launch the program and participate in a round table discussion on transnational law.

The event, held from noon to 1 p.m. in the Bryan Cave Moot Courtroom of Anheuser-Busch Hall, is open to the public and eligible for one Missouri Continuing Education Legal credit.

The transnational law program will prepare students to enter and ultimately assume leadership in the expanding areas of international and transnational law, said Michael Peil, J.D., assistant dean for international programs and executive director of the law school's Whitney R. Harris World Law Institute.

"We are excited to offer this unique new program that will benefit both our students and faculty and students and faculty



COURTESY PHOTO

Utrecht University

at our partner schools," Peil said. "The integrated aspect of the curriculum makes it unlike any other offering at our peer institutions. Both our American and European graduates will be prepared for rewarding professional lives in an increasingly globalized world."

Dorsey D. Ellis Jr., J.D., the William R. Orthwein Distinguished Professor of Law and chair of the program's faculty advisory committee, noted: "While program graduates will receive degrees in both Europe and the United States, their education will be more than the sum of these two systems.

"The transnational law program's focus reflects the new reality of a legal environment that transcends national boundaries. Financial and commercial transactions, for example, cross borders every minute of every day; environmental impacts know no national borders, and family law cases as well as criminal prosecutions increasingly exhibit transnational dimensions.

"Law firms, businesses, government agencies and nongovernment organizations have a growing need for lawyers trained in transnational systems," he said.

Charles Burson, J.D., retired executive vice president and general counsel at Monsanto Co. and a member of the law school's National Council, said the program will help train law students for the demands of international business.

"This bold program provides law students a platform from which to launch into the new reality of our global market. Participation in the program will open up new and exciting opportunities for students, to the benefit of their future employers and clients," said Burson, who is of counsel at Bryan Cave LLP in St. Louis and a visiting professor of law.

Similarly, Thomas Lowther, J.D., National Council member and partner at the Stolar Partnership in St. Louis, said: "In today's shrinking world, any lawyer with a commercial practice will sooner or later encounter an international transaction.

"The power of this program is that it exposes students to legal systems that differ from ours, making them more alert to legal issues in cross-border transactions," he said.

Adriaan Dorresteijn, dean of University College at Utrecht, said the program is a natural fit: "This unique program builds upon our very successful partnership with Washington University School of Law, including the Summer Institute for Global Justice and other faculty and student exchanges.

"The new degree program addresses an obvious need for students and faculty at both universities," he said.

Leila Nadya Sadat, J.D., the Henry H. Oberschelp Professor of Law and director of the Harris Institute, launched the highly popular summer program in Utrecht in 2005.

Focusing on international justice, this program draws distinguished faculty and students from around the world.

WUSTL receives national recognition with Community Service Honor Roll

BY NEIL SCHOENHERR

Washington University has been named to the 2007 President's Higher Education Community Service Honor Roll.

"We at the Gephardt Institute for Public Service, which acts as the University's nexus for service, are continually impressed with the depth and breadth of community involvement by our students, faculty and staff," said Robin Hattori, program director at the institute. "They dedicate substantial hours and apply their talents to impact the environment, education, health care and more. Being named to this honor roll confirms that civic engagement and community service are primary values of the University."

The honor roll, launched in 2006, recognizes colleges and universities nationwide that support innovative and effective community service and service-learning programs. It is a program of the Corporation for National and Community Service and is sponsored by the President's Council on Service and Civic Participation, the USA Freedom Corps, and the U.S. Departments of Education and Housing and Urban Development.

The Gephardt Institute applied in the fall for the recognition. "We estimated the number of hours of service provided by our students through community service activities as well as service-learning courses," Hattori said.

The application highlighted numerous WUSTL community service projects, including the University-wide blood drives, Relay For Life, Engineers Without Borders and Service First. It also showcased programs that support improved high-school graduate and college readiness of youth from disadvantaged circumstances, such as Each One Teach One College Bound, Latino youth mentoring programs, the Campus Y Youth University Program, the Wellston School District collaboration and the Latino Empowerment Team alternative spring break.

Moss

A key data point for plant evolution

– from Page 1

tion with the Leeds group in the United Kingdom, with the rest contributed by the Japanese and German groups, as well as by JGI, over the past three years.

"This is a pretty exciting little genome," said Richard K. Wilson, Ph.D., professor of genetics and of microbiology in the School of Medicine and director of the Genome Sequencing Center. "It's really going to be a key data point for understanding the evolution of plants and the role of the genome in driving and reacting to change."

Quatrano noted that until the sequencing of *Physcomitrella*, the only multicellular land plants to have been sequenced were the flowering plants rice, *Arabidopsis* and poplar.

"It is surprising that the moss genome has so many genes," Quatrano said. "Moss is an anatomically simple plant: it doesn't have true roots, stems or leaves, nor flowers or seeds. But it has a whopping 35,000 predicted genes, many similar to what is seen in flowering plants, but about 20 percent unique to moss only."

Quatrano said the ancestors of mosses and flowering plants diverged 450 million years ago, shortly after plants colonized land. "One can now do comparative genomics, say between a single-celled alga, a moss and a flowering vascular plant," Quatrano said.

"This enables us to look deep into the history of plants. Over the next five to 10 years, other plants that are part of a green tree of life will be sequenced, and we'll see how these genomes have evolved and what genomic changes are associated with major evolutionary transitions, such as the evolution of wood, seeds and flowers," he said.

"The moss genome sequence is a major landmark in understanding how plants originated and evolved," said Robert E. Blankenship, Ph.D., the Lucille P. Markey Distinguished Professor in Arts & Sciences and one of the paper's co-authors. "It provides us with a wealth of information as to how photosynthetic organisms made the difficult transition from aquatic environments to land. This information may be critical in the development of new bioenergy sources."

In addition to Blankenship, the paper's other WUSTL co-author is Susan K. Dutcher, Ph.D., professor of genetics and of cell biology and physiology and interim chair of the genetics department in the School of Medicine.

Dutcher's interest in the moss gene comes from her desire to understand cilia, tiny organelles that project from the surface of most human cells. She hopes that the *Physcomitrella* genome will be used to understand human health as well as to understand plant development.

"We have been interested for the last few years in the BBS genes (Bardet-Biedl Syndrome)," Dutcher said. "Children with mutations in these genes develop kidney and eye disease as well as diabetes. Comparative genomics with *Physcomitrella* suggest that these genes are needed in cilia in people for sensing intracellular environment."

In fact, the Quatrano lab, in collaboration with the WUSTL lab of Raphael Kopan, Ph.D., professor of developmental biology, recently published a paper on the function of a gene in moss called presenilin that is very similar to a gene in humans that has been implicated in Alzheimer's disease.

Quatrano's interest in the moss genome focuses on genes that give the plant drought tolerance. Once these genes are identified, it is possible that they might be genetically engineered into other plants, including food crops, to make them resistant to drought, a boon for Third World countries.

Scientists also will scrutinize the moss genome for examples of genes that are conserved — ones that appear in moss as well as other organisms, including humans — and try to discern their function.

Quatrano cited the efforts of WUSTL postdoctoral researcher Pierre-Francois Perroud, Ph.D., who isolated the moss DNA that JGI used to sequence the entire genome, as well as helping to identify contaminating sequences that were not in the moss genome.

Also, Cove was a visiting professor at WUSTL during this time and played an important consulting role in all aspects of the project. Support for Quatrano's lab effort came from National Science Foundation grants and from the University.

Quatrano said the process of accumulating scientists, annotating the assembled genome and publishing the paper, while long and difficult, is well worth the effort that he and his colleagues around the globe made.

"It's a great achievement, a real watershed in plant genomics," Quatrano said.

Bacteria

Findings may apply to other infections

– from Page 1

thought that bacteria could not penetrate that barrier."

A biopsy could reveal the presence of bacteria in bladder cells, but taking a tissue sample in an infected bladder incurs an unacceptable risk of allowing bacteria to spread into the bloodstream, a dangerous condition called sepsis.

Scientists also thought that if the bacteria were getting into bladder cells, they would replicate and spread rapidly, sometimes leading to sepsis. But after Hultgren first discovered in 1998 that bacteria are able to invade bladder cells, he later found evidence in his animal model that bacteria could establish residence inside those cells.

He showed that this process involved several behavioral changes that allow the bacteria to form cooperative communities known as biofilms. By working together, bacteria in biofilms build themselves into structures that are more firmly anchored in infected cells and are more resistant to immune system assaults and antibiotic treatments.

To prove that the model correlates with human infections, Rosen led an analysis of human urine samples sent from a clinic at the University of Washington in Seattle.

The 100 patients who gave samples were either suffering from an active, symptomatic infection or had previously suffered infections. Researchers analyzing the specimens were not told from which group the individual specimens had come.

Using light and electron microscopy and immunofluoresence, scientists found signs of bladder cell infection in a significant portion of the samples from patients with active UTIs. These included cells enlarged by bacterial infection and shed from the lining of the bladder.

In addition, Hultgren's experiments had previously suggested that some bacteria progress to a filament-like shape when exiting out of the biofilm. Rosen was able to identify bacteria with this filamentous morphology in 41 percent of samples from patients with symptomatic UTIs.

Neither indicator was detected in urine from women who did not have active infections. This was anticipated: Hultgren's animal model work suggests that when women are between episodes of symptomatic infection, intracellular *E. coli* may be in dormant phases where there would be little cause for bacteria or the cells they infect to be shed into the urine.

"What we're learning about how bacteria behave in the bladder may also have application to other chronic, treatment-resistant infections such as sinus infections and ear infections," Hultgren said. "Attacking biofilms is going to be a really important approach as we enter a new era of fighting infectious diseases."

Record

Volume 32, Number 23

Founded in 1905 • Washington University in St. Louis community news

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Record (USPS 600-430; ISSN 1043-0520), Published for the faculty, staff and friends of Washington University. Produced weekly during the school year, except school holidays, and monthly during June, July and August by the Office of Public Affairs, Washington University, Campus Box 1070, One Brookings Drive, St. Louis, MO 63130. Periodicals postage paid at St. Louis, MO.

Where to send address changes

Postmaster and nonemployees: Record, Washington University, Campus Box 1070, One Brookings Drive, St. Louis, MO 63130.

Employees: Office of Human Resources, Washington University, Campus Box 1184, One Brookings Drive, St. Louis, MO 63130.

Washington University in St. Louis

Notables

Olin Young Leaders launched with panel discussion

BY SHULA NEUMAN

The Olin Young Leaders Association (OYLA) launched onto the WUSTL scene this week with an inaugural event that epitomizes the richness OYLA brings to the Olin Business School's MBA program.

The event, "Managing the Changing Face of Business," took place Feb. 20 at the Charles F. Knight Executive Education Center and featured a panel discussion with three distinguished St. Louis business people. It also offered the opportunity for MBA students to meet and mingle with recruiters from more than 10 local corporations.

OYLA is a new initiative that enables mature, focused students to fast-track their management careers. Undergraduates who are admitted into the program pursue their MBAs immediately after or in combination with their bachelor's degree. The opportunity already has attracted an outstanding group of students from a variety of disciplines.

"Through the OYLA, we've embarked on a proactive way of identifying exceptional people and giving them the opportunity to excel in their fields," said Mahendra Gupta, Ph.D., dean of the Olin Business School.

"Bringing the best students directly into the MBA program adds to the diversity of MBA classes. It gives the younger students a chance to learn from their more experienced classmates, and it gives the older students a chance to absorb the knowledge and skills that the young leaders have recently acquired," he said.

"Managing the Changing Face of Business" was just one way that OYLA will provide valuable opportunities for all MBA students. The panel of high-powered executives openly discussed the unique challenges corporations are facing when it comes to recruiting techniques and the desirable skills that new business graduates need for future success.

The featured speakers were Sandra Van Trease, EMBA '92, group president at BJC HealthCare; Jim O'Donnell, MBA '74, president of Bush O'Donnell; and Larry Thomas, BSBA '77, partner at Edward Jones. Jackson Nickerson, Ph.D., the Frahm Family Professor of Organization and Strategy, moderated the discussion.

After the panel discussion, students were able to mingle with corporate recruiters over dinner. Firms that sent recruiters included Microsoft Corp., Booz Allen Hamilton, Wachovia, Centene Corp., Monsanto Co., ExxonMobil Corp. and Edward Jones.

Introducing new faculty members

The following are among the new faculty members at the University. Others will be introduced periodically in this space.

Elizabeth Brunt, M.D., joins the Department of Pathology and Immunology in the School of Medicine as professor. Brunt earned a doctor of medicine degree from the University of Texas Medical Branch at Galveston in 1981. Her anatomic pathology residency and surgical pathology fellowship were completed at Barnes-Jewish Hospital, and she served as instructor and assistant professor at Washington University from 1987-1994. Brunt has returned to Washington University after 12 years at Saint Louis University Health Sciences Center. She is a distinguished liver pathologist and is nationally and internationally recognized for her work on characterization of nonalcoholic steatohepatitis. Brunt will supervise a newly-formed Section of Liver and Gastrointestinal Pathology within the Division of Anatomic and Molecular Pathology.

Dengfeng Cao, M.D., Ph.D., joins the Department of Pathology and Immunology in the School of Medicine as assistant professor. Cao earned a doctor of medicine degree from Peking Union Medical College and a doctorate from the University of Pittsburgh. He completed his residency in anatomic and clinical pathology and advanced subspecialty fellowship training in surgical pathology in gynecologic pathology at The Johns Hopkins Hospital. Cao has an interest in diagnostic and molecular pathology of gynecologic and genitourinary malignancies.

Nabeel R. Yaseen, M.D., Ph.D., joins the Department of Pathology and Immunology in the School of Medicine as associate professor. Yaseen earned a doctor of medicine degree from the Baghdad University College of Medicine and a doctorate from Brown University. After postdoctoral training in the Günter Blobel Laboratory at The Rockefeller University, Yaseen received a faculty appointment at Northwestern University, where he distinguished himself as a diagnostic hematopathologist and physician-scientist. Yaseen will head the Section of Hematopathology within the Division of Anatomic and Molecular Pathology.

Obituary

Thurston, professor emeritus of English, 93

Jarvis A. Thurston, Ph.D., professor emeritus of English and former chair of Washington University's Department of English in Arts & Sciences, died Monday, Feb. 4, of heart disease at his home in University City. He was 93.

Thurston was instrumental in establishing WUSTL's creative writing program and attracting a constellation of distinguished writers to the University, including Stanley Elkin, Ph.D.; Wayne Fields, Ph.D., the Lynne Cooper Harvey Distinguished Chair in English and director of American Culture Studies; Donald Finkel; William Gass, Ph.D., the David May Distinguished University Professor Emeritus in the Humanities and founder of the Center for the Humanities in Arts & Sciences; John Morris, Ph.D.; Howard Nemerov, Ph.D., twice-named U.S. poet laureate; and Constance Urdang.

"Jarvis supported, published and sustained many promising young writers and was part of a generation of Western historians and writers that included Bernard DeVoto and Wallace Stegner," said Fields. "He loved literature and with his wife, Mona Van Duyn, played a key role in expanding the University Libraries' Modern Literature Collection."

David Lawton, Ph.D., professor and chair of the English department, called Thurston "one of the most important figures in the history of the department."

"His contribution, especially in bringing together critical and creative writing, was transformative," Lawton said. "Much of our identity today stems from the achievements of Thurston, Mona Van Duyn and the exceptional circle they gathered round them."

Thurston

Born in 1914 in Huntsville, Utah, Thurston earned a bachelor's degree from the University of Utah. He earned master's and doctoral degrees in 1943 and 1946, respectively, from the University of Iowa.

While at Iowa, Thurston met poet Mona Van Duyn. They married in 1943.

Thurston served as assistant professor of English at the University of Louisville from 1946-1950. In 1947, Thurston and Van Duyn founded Perspective: A Quarterly of Literature.

When Thurston joined the WUSTL English faculty as assistant professor in 1950, the magazine moved with the couple to St. Louis. Thurston became associate professor in 1955 and full professor in 1962. He served as English department chair from 1966-69 and became professor emeritus in 1982.

Thurston and Van Duyn, an instructor in WUSTL's English department, produced Perspective, with Thurston as editor, until it ceased publication in 1975.

Thurston was regarded as a key figure in discovering some of the nation's best literary talent. Perspective published the early writing of several of his WUSTL colleagues, along with works by James Gardner, Anthony Hecht, William S. Merwin and Douglas Woolf.

The co-author of "Short Fiction Criticism, 1800-1958" (1960), Thurston edited two books, "Reading Modern Short Stories" (1955) and "Short Stories from the Literary Magazines" (1972). He also published several literary articles and short stories.

Van Duyn was the nation's first female poet laureate (1992-1993) and winner of the 1991 Pulitzer Prize in Poetry. She died in 2004.

Thurston had no immediate survivors. A commemoration will be held 4 p.m. March 24 at Olin Library.

For more information, call 935-8389. Memorial contributions may be made to the Department of Special Collections, Washington University Libraries, Campus Box 1202.

Of note

Muthanna H. Al-Dahhan, Ph.D., professor of energy, environmental and chemical engineering and co-director of the Chemical Reaction Engineering Laboratory, has received a three-year, $599,995 grant from the U.S. Department of Energy — Nuclear Energy Research Initiative (NERI) for research titled "Advancing the Fundamental Understanding and Scale-up of TRISO Fuel Coaters via Advanced Measurement and Computational Techniques." …

D. Craig Allred, M.D., professor of pathology and immunology, received a one-year, $250,000 grant from the Breast Cancer Research Foundation titled "Epithelial-stromal Interactions in the Progression of Non-invasive to Invasive Breast Cancer." …

Todd Braver, Ph.D., associate professor of psychology in Arts & Sciences, has received a three-year, $210,000 grant from the National Institutes of Health for research titled "Neuroeconomics of Age Related Changes in Cognitive Control." …

The Central Institute for the Deaf has changed its street address from 4560 Clayton Ave. to 825 South Taylor Ave. to better reflect its main entrance off Taylor Avenue. …

Patrick Crowley, Ph.D., assistant professor of computer science and engineering, has received a one-year, $5,000 grant from the National Science Foundation for research titled "Support for the Symposium on Architecture for Networking and Communications Systems." …

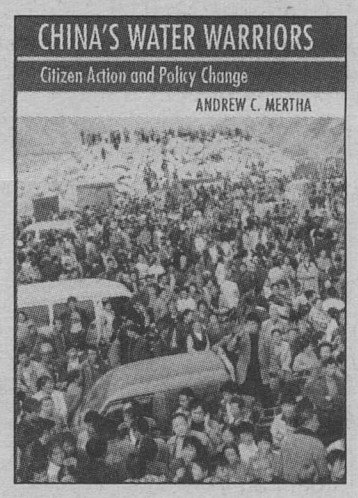
Daved H. Fremont, Ph.D., associate professor of pathology and immunology and of biochemistry and molecular biophysics, received a five-year, $1,249,636 subaward on a National Institutes of Health/National Institute of Allergy and Infectious Diseases contract through Northwestern University titled "Center for Structural Genomics of Infectious Diseases."

Campus Authors

Andrew C. Mertha, Ph.D., assistant professor of political science in Arts & Sciences

China's Water Warriors: Citizen Action and Policy Change

Cornell University (2008)



The Chinese government's recent decision to scrap controversial plans for a huge dam at Tiger Leaping Gorge on the upper reaches of the Yangtze River represents a milestone for growing grassroots political movements in China, said Andrew C. Mertha, Ph.D., assistant professor of political science in Arts & Sciences, in his upcoming book on the politics behind China's epic dam-building campaign.

"Fifteen years ago, opponents of large-scale dam projects in China were greeted with indifference or repression. Today they are part of the hydropower policy-making process itself," Mertha said.

Mertha based his book "China's Water Warriors: Citizen Action and Policy Change" on extensive field research in some of the most remote parts of Southwest China. Filled with firsthand accounts of widespread opposition to dams in Pubugou and Dujiangyan in Sichuan province and the Nu River Project in Yunnan province, the book documents dramatic changes in critical policies surrounding China's quest for energy.

"As China has become increasingly market-driven, decentralized and politically heterogeneous," Mertha said, "the control and management of water has transformed from an unquestioned economic imperative to a lightning rod of bureaucratic infighting, societal opposition and open protest."

Although bargaining has always been present in Chinese politics, Mertha's book shows how actors once denied a seat at the table — media, nongovernmental organizations and grassroots activists — are emerging to become serious players in the policy-making process.

Growing citizen dissent over the nation's relentless dam-building comes at a time when activists worldwide are raising concerns about the environmental and human costs associated with China's massive Three Gorges Dam.

The $25 billion Three Gorges Dam, scheduled for completion in 2009, will become the world's largest dam, creating a lake stretching some 500 miles along the Yangtze River, displacing as many as two million residents.

While the decision to abandon plans for the dam at Tiger Leaping Gorge — which would have submerged one of China's most renowned tourist areas — represents a victory for the burgeoning Chinese environmental movement, Mertha considered the impact and occasional success of grassroots movements and policy activism to be signals of an important and much broader shift in China's domestic politics.

China may now be experiencing a period of political unrest similar to the grassroots opposition that took root in the United States during the 1960s, Mertha said.

As Mertha pointed out in a recent Wall Street Journal article, public debates over dam projects have proven to be turning points in how other societies view environmental issues.

In the United States, a 1963 government proposal to build dams on the Colorado River in the area of the Grand Canyon unleashed an outpouring of opposition. In 1967, the government abandoned the plan. Many scholars now date the decline of large-scale dam building in the United States to that event, the article noted.

— Gerry Everding

Washington People

Teachers' techie

Liz Peterson keeps teachers and classrooms on the cutting edge of technology

BY JESSICA DAUES

Liz Peterson has many duties as associate director of The Teaching Center. Now she can add "giant screen finder" to the list.

Last summer, Peterson worked with the Sam Fox School of Design & Visual Arts to renovate Steinberg Auditorium. The auditorium had no chalkboard or whiteboard, and no projector or screen. But it did have an immense white wall at its front, which one professor used to display 35-millimeter slides.

Peterson's job: to come up with a new auditorium design that would allow the professor to project his images at a similar size as well as fill the needs of other classes that might use the auditorium.

To install chalkboards at the front of the auditorium, Peterson had to find a screen big enough to compensate for the loss of the wall. But the vendor from which the University typically buys projector screens didn't offer one large enough. After some scheming and searching ("Sewing two projector screens together wasn't an option," Peterson says), she located a 12-by-21.3-foot projector screen and also found a projector that showed images in high-enough resolution to display the large images.

Problem solved, thanks to Peterson, who, along with her many other roles at The Teaching Center, is an integral member of the Classroom Monitoring Committee (CMC), a group that manages the nearly 100 University-pooled classrooms. Peterson helps design and renovate classrooms to make it possible to install technology such as projectors, SMART boards, computers and GIS software.

But her duties don't end there. Peterson trains and assists faculty who wish to use technology in their teaching, and she keeps up with the latest technology, such as tablet PCs and high-definition television, and determines how each could be used to keep the University on the cutting edge of education.

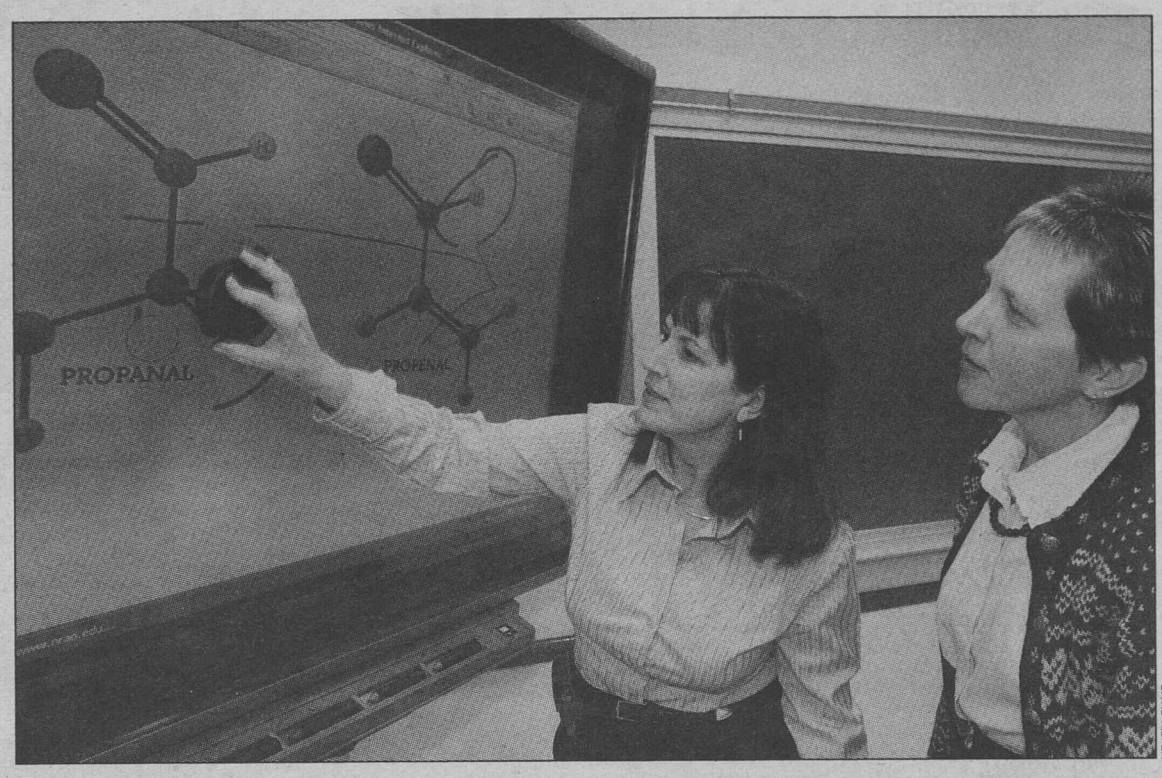
"When you talk with people around the University about The Teaching Center, Liz is one of the first people mentioned," says Regina Frey, Ph.D., the center's director and senior lecturer in chemistry in Arts & Sciences. "Working with our two technical staff members — Mike Floyd and Alan Wieter — Liz has helped to make technology more intuitive to use for the faculty and has seamlessly incorporated the technology into the classroom without sacrificing the traditional teaching needs of the faculty member."

Though Peterson never has worked as a teacher, she is conscious of faculty members' needs and serves them well.

"Liz understands the necessity of having technology that is easy to use and intuitive," Frey says. "She is also very aware that teachers have only a short amount of time to get the technology up and running for each class period."

Peter Kastor, Ph.D., associate professor of history in Arts & Sciences, agrees.

"Liz is extremely easy to work with," he says. "Part of that is a matter of personality, and part is the degree to which she understands the pedagogical goals of faculty. That's very different from just understanding the technology. She clearly understands a professor's language."



DAVID KILPER

Liz Peterson (left) and Regina Frey, Ph.D., examine renderings of molecules shown on a flat-screen monitor and SMART Overlay in Eads Hall. "Liz understands the necessity of having technology that is easy to use and intuitive," Frey says. "She is also very aware that teachers have only a short amount of time to get the technology up and running for each class period."

Liz Peterson

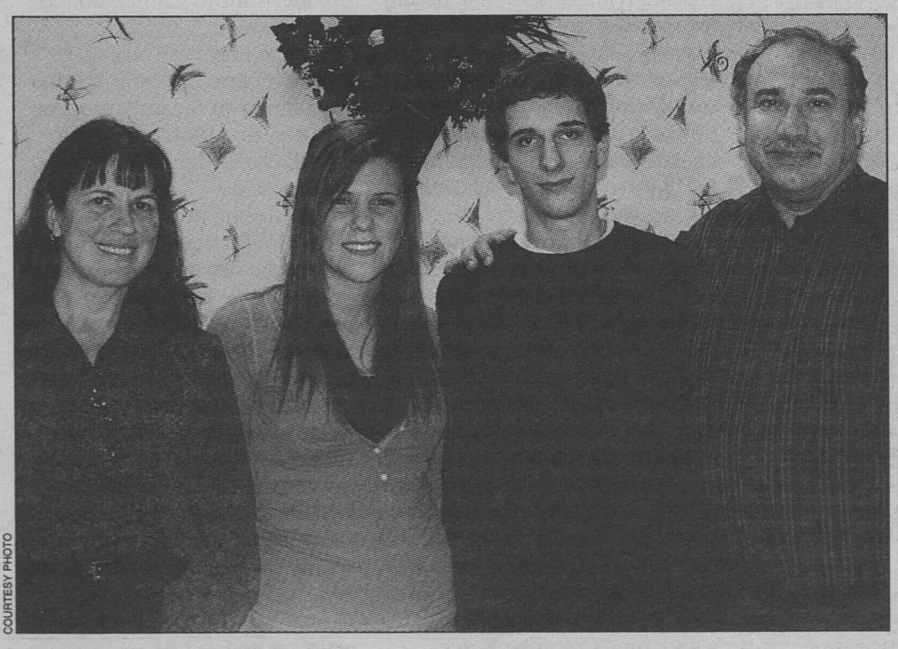
Education: B.A., speech communications, 1980, University of Missouri-St. Louis; M.A., mass communications, 1988, Webster University

Family: husband, Mike Schmidt; son, Matthew, 17; daughter, Nelli, 14; and three Shih Tzus: Cuddles, Reagan and Louie

Favorite book: "Gone with the Wind"

First job: Kentucky Fried Chicken. "It was within walking distance of the house," she says. "With seven kids in the family, you could never be guaranteed a ride."

Home is: Ballwin, Mo., though Peterson grew up in Kirkwood, Mo., and also has lived in Columbia, Mo., and Los Angeles



COURTESY PHOTO

(From left) Liz Peterson; daughter, Nelli; son, Matthew; and husband, Mike Schmidt.

The California girl

As successful as she has been assisting faculty, as a young girl Peterson — the daughter of a hardware, shoe and belt salesman — didn't foresee herself working in higher education. After graduating from Kirkwood High School in 1976, Peterson decided to take up the family business: sales.

"Sales was very male-dominated," she says. "I wanted to break into it."

Peterson majored in speech communications at the University of Missouri-St. Louis "to help me better interact with customers," she says. After earning a bachelor's degree, Peterson moved to Los Angeles at the insistence of her best friend, who had relocated to L.A. after college. Peterson, a lifelong Midwesterner, got a job selling copiers and began relishing life as a Californian.

"I loved living by the beach," Peterson says. "I learned how to windsurf and kayak; I was part of an outrigger canoe team and crewed large boats. I think people who grew up in California probably don't take as much advantage as people who come out there to live. For those of us who grew up in the Midwest, California was like a big playground."

As much as she enjoyed her playtime, after a year in L.A., Peterson realized she wasn't passionate about her job as a copier saleswoman. Two of her apartment-mates, both engineers who worked at Ford Aerospace, suggested she apply for a contracts management position at Ford. After a series of interviews, Peterson was offered a position and ventured into a new career field.

Still, after settling into the new job, Peterson noticed Ford and other aerospace companies were going through some rough times as government contracts ended and co-workers lost their jobs.

After five years in contracts management, Peterson made a difficult decision: She moved back to St. Louis and applied to graduate school.

"I loved California, but I loved security even more," she says. "I thought it would be best for me to go home and get a master's degree that would lead to a job in a field that I was more interested in."

The technology whiz

With the hopes of breaking into television or radio broadcasting, Peterson enrolled in Webster University's graduate media communications program. She earned her master's degree in mass communications in 1988 and began working at the George Warren Brown School of Social Work's Video Center.

"I was interested in video production, and the job provided an all-encompassing experience where I got to write, videotape and edit mental health videos," Peterson says.

While working at the Brown School, Peterson noticed more and more faculty requesting audio-visual equipment in their classrooms. Her duties expanded to ensuring that the audio-visual needs of classrooms, colloquia and special events were filled.

In 1995, Peterson moved to The Teaching Center to address the audio-visual needs of the University-pooled classrooms. Her job expanded to oversee the introduction and use of technology in classrooms, and she has been involved in 75 major, minor and technology-enhancing classroom renovations while at The Teaching Center.

"When I first started at The Teaching Center, only two classrooms had video projectors in them," Peterson says. "Now we have more than 85 fully equipped instructional technology classrooms."

In an effort to help faculty integrate technology into the classroom, Peterson helped organize the first ITeach symposium, an event that provides an opportunity for faculty members to share ideas and insights on teaching and technology, in 2002. Her efforts won her the 2002 Arts & Sciences Dean's Award. ITeach now is a biennial event, and Peterson still plays a significant role in coordinating it with Frey.

Through her efforts to introduce faculty to technology and assist them in its use, Peterson has helped transform technology from a novelty to the norm in WUSTL classrooms.

"When I first arrived at the University, technology was available but required a fair amount of legwork in terms of planning in advance and coordination," says Kastor, who came to WUSTL in 2004. "With the system we have now, I go into a classroom, and everything I need is there; it's reliable, and the systems used are consistent and intuitive. Liz has been a crucial player in this transformation."

The family lady

Peterson met her husband, Mike Schmidt, in 1998 through an Internet dating service. He asked her out, and she accepted but got nervous and later cancelled.

"A couple of months later, I called him up," she laughs. "He was so nice and wasn't mad. I asked him if we could go out again." Ever the gentleman, Schmidt said yes. Their second first date was a success, and the couple married in 2000.

Both Peterson and her husband wanted children and, while they were engaged, decided to begin the process of adopting kids in need through the foster care system.

"Everyone told us it would take years to get children," she says, "but before we were even finished with the seven-week class, two kids became available."

Matthew, 9, and Nelli, 6, a brother and sister who had been in foster care for three years, arrived with all their worldly belongings packed in 20 plastic bags.

Adjusting from a quiet house to one filled with two energetic, school-age children would be a challenge for any new couple, and it was no different for Peterson and her husband. Still, "once Matthew and Nelli arrived, our life became that much more complete," Peterson says. "Mike and I can't imagine life without them."

Just as it's difficult to imagine The Teaching Center without Peterson.